## HOUSTON COMMUNITY COLLEGE SYSTEM BIOL. 1406, GENERAL BIOLOGY I, CRN 16342 Fall 2016 Second Start

Dr. Partha Sen

**TEXT BOOK**: Reece, Jane B. *et al* 2011. Biology, 9th Ed. Pearson., Inc. and Masteringbiology; Go to <a href="http://www.pearsonmastering.com">http://www.pearsonmastering.com</a> for registering in mastering; use sen61413 as the course ID.

**PLEASE NOTE:** It's very important students either purchase their book/access code bundle from the HCC Bookstore OR purchase directly online via the registration process as detailed in the video below. HCC has custom courses set up with a negotiated price for HCC students – if an access code is purchased at any other retailer, it will not work.

To help students register for this course, here is a quick registration video that can help students: http://screencast.com/t/XhhEKf12B2o

And here is a link for registration handout and power point presentation:

http://www.pearsonmylabandmastering.com/northamerica/educators/mm-support/get-started/index.html

LAB MANUAL: BIOLOGY 1406 Laboratory Manual, HCCS-Southwest, Tom Loesch et al Third Edition

LECTURE: Tuesday 2:00 – 5:00 PM; Room: C222 LAB: Thursday 2:00 – 5:00 PM; Room: 162

CONTACT: partha.sen@hccs.edu Office hour: By appointment

**COURSE DESCRIPTION & GOAL**: This course focuses on an introduction to biological chemistry, biological processes, cellular morphology and reproduction, inheritance, and molecular genetics; and imparts a basic knowledge of life processes. It is a prerequisite/recommended for Gen. Biol. II, A&P I & II, and Microbiology.

## **RULES AND REGULATIONS:**

- 1. Text book and Laboratory manual are required.
- 2. Class attendance is required. Four absences will result in administrative withdrawal.
- 3. You must read the lab safety rules before doing any of the lab exercises and follow them.
- 4. Lab reports: Although students will work in groups, individual active participation is expected. You are required to complete the lab reports.
- 5. No make up exams will be given. Should a student arrive after the first examinee has turned in the test materials, she/he will be considered as not having taken the examination.
- 6. No extra credit
- 7. No food or drink in the labs
- 8. Cellular telephones to remain off while in the class. No text messaging. Phones should not be on the desk.
- 9. No Web browsing. Points from your test grade will be deducted if you don't obey the rules.

Attendance Policy: Please go over the attendance policy of HCCS. "Students are expected to attend classes regularly. Students are responsible for materials covered during their absences. Class attendance is checked daily by instructors. Although it is the responsibility of the student to drop a course for non-attendance, the instructor has full authority to drop a student for excessive absences. A student may be dropped from a course for excessive absences after the student has accumulated absences in excess of 12.5% of the hours of instruction (including lecture and laboratory time)." I realize that sometimes outside circumstances can interfere with school, and I will try to be as accommodating as possible, but please be aware of the attendance policy.

**Disability Support Services**: Any student with a documented disability (e.g. physical, learning, psychiatric, vision, hearing, etc.) who needs to arrange reasonable accommodations must contact the Disability Services Office. Faculty is authorized to provide only the accommodations requested by the Disability Support Services Office.

**Academic Honesty**: Students are responsible for conducting themselves with honor and integrity in fulfilling course requirements. Disciplinary proceedings may be initiated by the college system against a student accused of scholastic dishonesty. Penalties can include a grade of "0" or "F" on the particular assignment, failure in the course, academic probation, or even dismissal from the college. Scholastic dishonesty includes, but is not limited to, cheating on a test, plagiarism, and collusion.

**New Repeat Policy:** Students repeating a course third time or more will be charged a \$50 /credit hour fee increase at HCC and other Texas public Colleges and Universities. Please ask your instructor/counselor about opportunities for tutoring/other assistance prior to considering withdrawal or if you are not receiving passing grades.

Date	Chapters	Topics to be covered
09/20 T 09/22 R	1, 2 Lab 1	Organization session, Introduction, The chemical context of life Basic Chemistry
09/27 T 09/29 R	3, 4 Lab 2	Water and Fitness of the Environment, Carbon and Molecular Diversity Properties of water
10/04 T 10/06 R	5, 6 Lab 3	Structure and Function of Macromolecules, A tour of the cell 1st Lecture Exam (Chapter 1-5), Biochemistry: Detection of Biological Molecules, the scientific method, and experimental design
10/11 T 10/13 R	7, 8 Lab 4, 5	Membrane Structure and Function, Introduction to Metabolism The care and use of the microscope; Cell Structure
10/18 T 10/20 R	9 Lab 6, 7	Cellular Respiration Diffusion and Osmosis; Enzymes
10/25 T 10/27 R	10 Lab 8, 9	Photosynthesis  1st Lab Exam; Respiration and Fermentation; Photosynthesis and Spectrometry
11/01 M 11/03 W	12, 13 Lab 10	The Cell Cycle; Meiosis and Sexual Life Cycles <b>2<sup>nd</sup> Lecture Exam (Chapters 6-10);</b> Cell division
11/08 T 11/10 R	14, 15 Lab 11	Mendel and Gene Idea; The chromosomal basis of inheritance Genetics
11/15 T 11/17 R	16, 17 18, 19	The Molecular Basis of Inheritance, From Gene to Protein Regulation of Gene Expression, Viruses 3 <sup>rd</sup> Lecture Exam (Chapters 12-16)
11/22 T	Lab 12, 13	DNA to Protein; Biotechnology and DNA extraction
11/29 T 12/01 T	20	Biotechnology
12/06 R		2 <sup>nd</sup> Lab Exam
12/08 T		Final Examinations (Instructor and system wide; Comprehensive; All chapters)

## **GRADE COMPUTATION:**

3 Lecture Exams - 45% (Lowest grade dropped), Comprehensive Final Exam - 20%, 2 Lab practical Exams - 20%, Quizzes and Home work - 10%, Lab reports and participation - 5%

There will be two finals, one from the instructor and the other from the system (90 - 100% = A; 80 - 89% = B; 70 - 79% = C; 60 - 69% = D; Below 60% = F)

## LAST DATE FOR ADMINISTRATIVE/STUDENT WITHDRAWAL: NOVEMBER 07, 2016 INSTRUCTOR WILL NOT BE RESPONSIBLE IF YOU GET 'F' FOR NOT WITHDRAWING YOURSELF INSTRUCTOR RESERVES THE RIGHT TO CHANGE INFORMATION IN THIS SYLLABUS